

project WEB

fall
2002

Connecting Projects WILD, WET and Learning Tree in New Hampshire

Hurray for Environmental Laws

Many of us have no idea how lucky we are to have such a progressive history of strong environmental legislation. Sometimes, as environmental educators and as Americans, we feel frustrated that it doesn't seem we are making progress. Yet, when we look at Europe, where relatively untouched natural areas with abundant wildlife are mostly a thing of the past... and at Canada, where raw city sewage is piped into Puget Sound, we must remember that what we do has a big impact.

A look at this issue, which focuses on environmental legislation, may help us realize that good progress is being made. By continuing to do our best educating the young people of today about the value of a healthy environment, we can be assured that we are preparing them for the important task of continuing to protect our environment for future generations. ●WEB

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Wildlife Laws, Schools and Educators

Why we have wildlife laws



Between 1700 and 1900, New Hampshire's landscape changed dramatically. Increasing numbers of settlers meant a sharp rise in the number of acres

cleared for agriculture, communities and transportation. Wide-scale and unregulated hunting and trapping of large game and smaller fur-bearing mammals for the meat and fur markets put additional pressure on wildlife populations. The demand for feathers in ladies' hats also severely impacted wild bird populations.

Extensive habitat change was the primary cause for the sharp reductions in wildlife populations. As a result of habitat reduction and the effects of unregulated harvesting, many wildlife species could not adapt successfully. Some species

were virtually non-existent by the early 1900s. Few people realize that by 1900 there were no beaver left in New Hampshire, white-tailed deer were rare and there were less than fifty moose. New Hampshire officially began conservation efforts when the first game detectives were hired in 1890. Many wildlife laws were passed to protect game as well as non-game species. Wildlife laws developed on the federal level also served to control commercial exploitation and illegal trade.

Summary of Important Wildlife Laws:

Possession of migratory birds, including feathers, nests and eggs

Anyone possessing migratory birds, their parts or products, should be aware that all the birds and their parts are protected under federal law by the Migratory Bird Treaty Act (16U.S.C. 703-712). Wording of the act states clearly that most actions



"We are not building this country of ours for a day. It is to last through the ages."

Theodore Roosevelt,
U.S. President,
1901-1909



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Fish and Game
Department

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that result in “taking” or possession of a protected species or its parts or products is a violation of the act. Specifically, it states:

“Unless and except as permitted by regulations, it shall be unlawful at any time, by any means, or in any manner...to pursue, hunt, take, capture, kill,...possess, offer for sale, sell,...purchase, import...any migratory bird, any part, nest, or eggs of any such bird...”

It is a “strict-liability” law, meaning there is no requirement for law enforcement agencies to prove “intent” to violate the law. That is, anyone found in possession of a protected species or its parts or products is automatically in violation of the law. The provisions of the act are nearly absolute; “...except as permitted by regulations...” is the only exception. Some examples of permitted activities that do not violate the law are legal hunting of specific game birds, legitimate research activities, display in licensed zoological gardens, and bird banding under an appropriate permit.

The Migratory Bird Treaty Act covers the great majority (83%) of all native birds found in the U.S. Many of the species not covered in it are covered by the Endangered Species Act or other federal or state laws. In the lower 48 states, all species except the house sparrow, feral pigeon, common starling and non-migratory game birds like pheasants, gray partridge and sage grouse are protected.

Penalties can be severe. Even if a sympathetic jury finds that you meant no harm in trying to rear an abandoned nestling or in picking up a hawk feather,

legal defense costs are clearly not worth the risk. In summary, your best approach is to look, but don’t collect.

Most of the above information is taken from a paper entitled *Birders and U.S. Federal Law*, by Craig Faanes, Cleveland Vaughn Jr., and Jonathan Andrew. THE U.S. FISH AND WILDLIFE SERVICE’S MIGRATORY BIRD MANAGEMENT OFFICE offers *A Guide to the Laws and Treaties of the United States for Protecting Migratory Birds*. Any questions regarding permits to possess or collect birds must be addressed to the U.S. FISH AND WILDLIFE SERVICE, MIGRATORY BIRD TREATY OFFICE.

There are provisions within the law that allow the N.H. FISH AND GAME DEPARTMENT’S LAW ENFORCEMENT DIVISION to issue a N.H. Special Wildlife Permit to public educational institutions to possess a (dead) protected species. It applies to hawks, owls, songbirds and others, for example, that may be donated to, or mounted by schools for educational purposes (50CFR 21.12b).

Possession of mammal mounts

In most cases there is no permit required to possess already-mounted mammals unless they are an endangered species and covered by the CITES Treaty.

Collection of road kill mammals

Collection of road-killed mammals that are designated as a game or fur-bearing species requires a collection/salvage permit. A permit can be requested by writing to the director of the N.H. FISH AND GAME DEPARTMENT. It should

include an explanation of what is to be collected and why.

Possession of live native New Hampshire mammals

Possessing live, native mammals requires a special permit, which can be requested by writing to the director of the N.H. FISH AND GAME DEPARTMENT. There are a number of laws and rules that apply to the keeping of native mammals.


Collecting live aquatic invertebrates, amphibians, reptiles and non-game fish

To date, there are few rules regarding collection of these animals. It is, however, unlawful to collect spotted, wood, Blandings and eastern box turtles without a permit.

Collecting and Possessing Game Fish

Game fish may be possessed in the classroom if they have been taken legally under a fishing license and are within the possession limit; or taken and possessed under a scientific permit issued by the director of the N.H. FISH AND GAME DEPARTMENT.

Release

If you have gained specimens from a biological supply house, pet store or other supplier, you cannot release them (fish, mammal, bird, insect, amphibian, crustacean, etc.) into the wild without written permission from the N.H. FISH AND GAME DEPARTMENT. This extremely important law is designed to prevent the spread of exotic species.  **WEB**

Activities Related to Articles in This Issue

Project Learning Tree suggests:

In *There Ought To Be A Law*, students find out how local laws are made and how they can get involved in the process.

Democracy In Action helps students learn about the roles and responsibilities of citizens’ groups in environmental policies and decision-making.

In The Good Old Days helps students learn about the writings of men and women who have shaped the way people think about the environment.

Project WET suggests:

Students practice resolving conflicts involving water quantity and quality issues through mock mediation and litigation in *Water Court*. This activity contains a listing of important water resource legislation.

Students draft a *Water Bill of Rights* based on a review of the US Bill of Rights and their personal expectations regarding access to and use of water.

In *Pass the Jug*, students simulate and analyze different water rights policies that states use to regulate water allocations.

Project WILD suggests:

In *Philosophical Differences*, students present an environmental issue to members of their community and correspond with representatives.

Rare Bird Eggs for Sale gives students the opportunity to debate the reasons for and consequences of collecting.

Students gain real-life experience in studying and participating in the legislative process in *Know Your Legislation: What’s in it for Wildlife?*

In *Wild Bill’s Fate*, students investigate pending wildlife legislation.



Timeline of Environmental Legislation

The timeline identifies some key federal and state legislation* related to the environment.

- 1850 - Swamp Act: encourages draining of wetlands
- 1862 - Homestead Act: opens West to settlement and water development
- 1866 - N.H. Fisheries Commission: protects state fish populations
- 1880 - N.H. Commission of Fisheries and Game: extends protection to game populations
- 1899 - Rivers and Harbors Act: prohibits discharge of solids into navigable rivers
- 1901 - Society for the Protection of New Hampshire Forests established
- 1911 - Weeks Act: authorizes the purchase of lands for national forests
- 1924 - Oil Pollution Act: prohibits discharge of oil into marine waters
- 1936 - Pittman Robertson Act: enables wildlife restoration
- 1948 - Water Pollution Control Act: provides assistance to municipalities for wastewater treatment
- 1950 - Dingell Johnson Act: enables sport fish restoration
- 1964 - Wilderness Act: preserves regions of federal lands from development
- 1966 - Endangered Species Act: enables protection and restoration of endangered species
- 1969 - National Environmental Policy Act: establishes EPA
- 1970 - Clean Air Act: regulates air emissions and established national ambient air quality standards
- 1972 - Clean Water Act: controls discharge of pollutants into surface waters
- 1974 - Safe Drinking Water Act: sets up drinking water standards and coordinates monitoring of public water systems
- 1976 - National Forest Management Act: requires assessment of forest lands and development of management programs for national forests
- 1979 - N.H. Endangered Species Act: state listing of species allows for protection and restoration
- 1980 - Comprehensive Environmental Response, Compensation and Liability Act (Superfund): directs EPA to clean up abandoned toxic waste dumps
- 1987 - N.H. Department of Environmental Services established: previously four separate agencies
- 1987 - Wild and Scenic Rivers Act: protects in-stream flows for rivers designated as wild and scenic
- 1987 - Water Quality Act: requires EPA to regulate storm water runoff
- 1987 - Plastic Pollution Research and Control Act: prohibits ocean dumping of plastic materials
- 1987 - Land Conservation Investment Program (LCIP): helps communities protect lands of natural beauty by acquiring them through voluntary negotiations with landowners
- 1993 - President Clinton signs order restricting logging in old growth forests
- 2000 - Land and Community Heritage Investment Program (LCHIP): helps communities conserve important natural, cultural and historic resources
- 2000 - Water Supply Land Conservation Program: helps communities conserve land for water supply protection

WEB SIGHTINGS...

A SHORT-LIST OF WEBSITES
FOR YOUR SURFING PLEASURE



N.H. SENATE Web PAGE for
Kids:

[www.gencourt.state.nh.us/
senate/misc/kids.html](http://www.gencourt.state.nh.us/senate/misc/kids.html)



EPA TEACHERS' PAGE:

www.epa.gov/teachers/



EPA Kids' PAGE:

www.epa.gov/kids/



EPA STUDENTS' PAGE:

www.epa.gov/students/

*All legislation is federal
unless it is in **color**,
which indicates
state legislation/events.



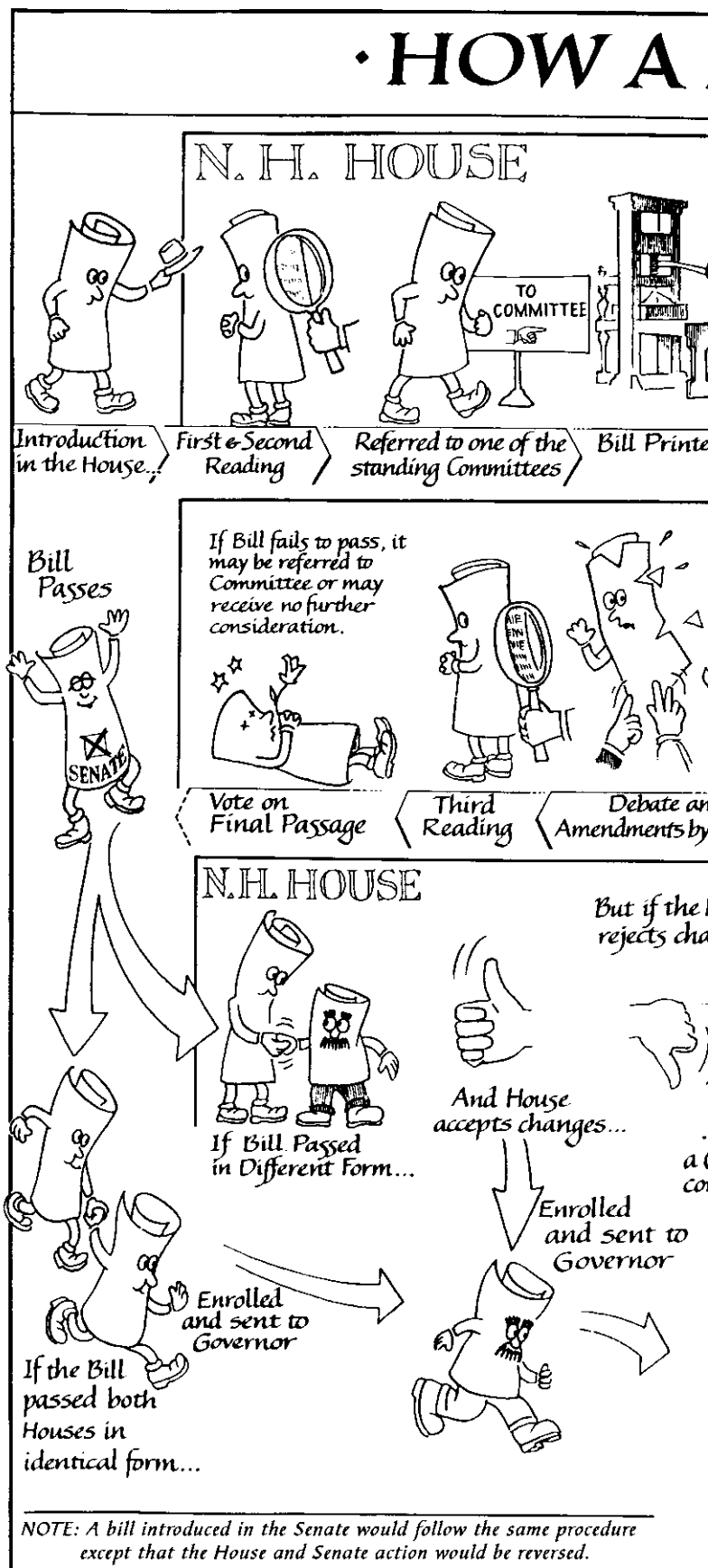
The Federal Role in Environmental Education

Through the years the federal government's role in environmental education has varied. Since 1990 the Environmental Protection Agency (EPA) has led federal environmental education efforts.

In 1970 Congress passed the Environmental Education Act, which enabled creation of an Office of Environmental Education within the U.S. Department of Health, Education, and Welfare to award grants for developing environmental curricula and teacher training. The office was moved to the newly formed U.S. Department of Education in 1979, but was eliminated two years later in an effort to move responsibility for the program to the states. The National Environmental Education Act of 1990 restored the federal role in environmental education by authorizing the EPA to work with schools, agencies, businesses and others to educate the public about environmental issues and to encourage students to pursue environmental careers.

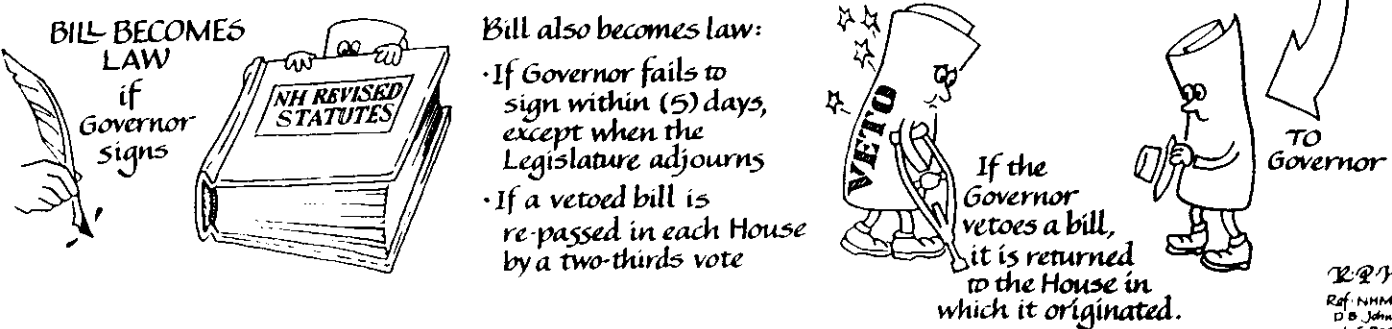
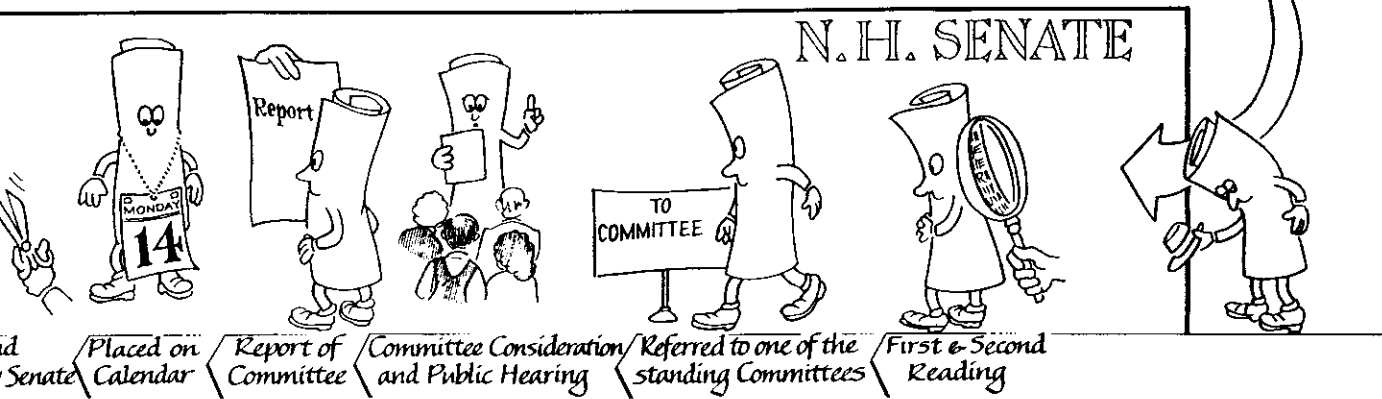
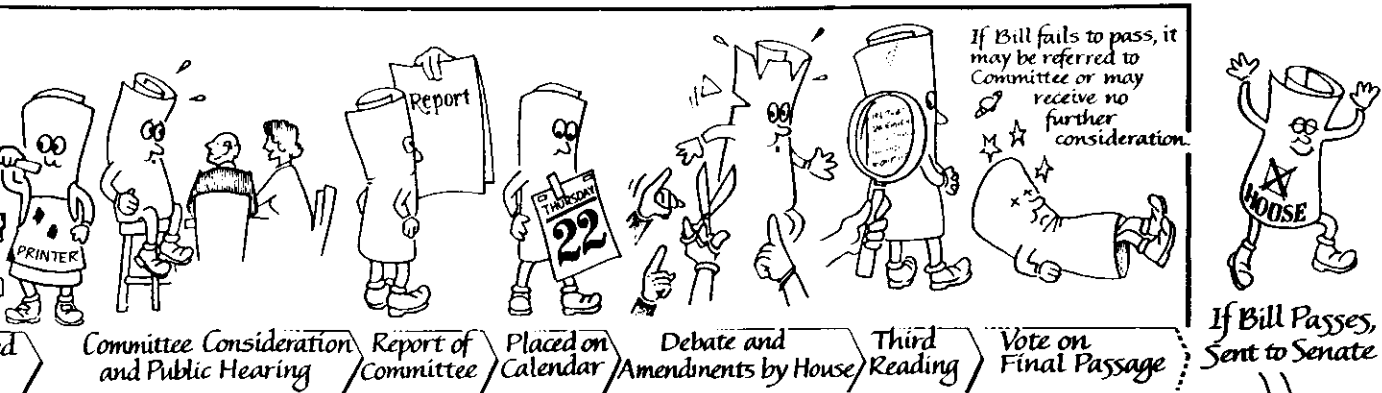
The Environmental Education Office has implemented several programs to achieve increased public understanding of environmental issues and to promote sustainability. The programs include training for educators to develop and teach environmental curricula, the award of student internships, recognition of outstanding contributions to environmental education and the fostering of environmental cooperation between the U.S., Canada and Mexico.

At press time federal funding for environmental education is in serious jeopardy.



BILL BECOMES A LAW.

Presented to the
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Keene High School Team Wins National Envirothon

Congratulations to KEENE HIGH SCHOOL, whose Envirothon team placed FIRST at the *National Envirothon Competition* in Amherst, Massachusetts this past summer. The students beat 42 states and 7 provinces to capture the title. To learn more about the high school Envirothon competition, see its website at www.envirothon.org or contact Herb Vadney at (603) 279-3436 or vadney@juno.com.

Nominations for N.H. Environmental Teacher of the Year

NEW HAMPSHIRE ENVIRONMENTAL EDUCATORS (NHEE) is pleased to join with the NEW HAMPSHIRE DEPARTMENT OF EDUCATION in seeking nominations for three annual awards recognizing New Hampshire's outstanding environmental teachers. Awards of \$100 cash and a one-year membership in NHEE are presented in elementary school (K-6), middle/secondary school (7-12), and non-formal categories. The deadline for nominations is February 1, 2003. Application materials can be found at www.neeea.org/nh or by contacting Eleanor Abrams at eleanor.abrams@unh.edu.

New Water Quality Resources Available

NEW HAMPSHIRE PROJECT WET announces the availability of its newest resource, *Healthy Water, Healthy People*. This program focuses on water quality and provides the same innovative activities you have come to know and love. Today, many schools involve students in water quality monitoring and the HWHP Educators Guide will help students understand the science behind all those samples and tests. For more information, visit www.healthywater.org or contact Nicole Clegg at (603) 271-4071.

N.H. Malformed Frog Report Available

The NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES recently released a report detailing its four-year study of malformed frogs in New Hampshire. The study revealed a malformation rate of just

under six percent. The most common malformations occurred to hind limbs, eyes, and front limbs. The report can be found at www.des.state.nh.us/wmd/biomonitoring/frogs.

Clean Water Poster Contest

The NEW HAMPSHIRE POLLUTION CONTROL ASSOCIATION has announced its *2003 Clean Water Week Poster Contest*. Schools of K-6 students are invited to submit posters for judging. Deadline is in early winter. For complete details about submission requirements, contact Ed Rushbrook at Dufresne Henry Inc. at (603) 669-8672. Cash prizes are awarded to winning entries.

National PLT Branch Newsletter Goes Online

As of fall 2002, the national PLT Branch newsletter will be *online only*. The new format will include four sections: 1) EE News; 2) Featured Contributor; 3) Teacher Tips; and 4) EE Resources. The newsletter will be posted quarterly and with each new edition, the "old" news will be archived by section. The online version can be accessed at www.plt.org/newsletter/index.cfm. A brief email notification will be sent to trained PLT teachers when a new Branch issue is posted online. If you currently receive the Branch in the mail and would like to receive these email reminders, send your email address to info@nhplt.org.

BLM Fire Management/Education GreenWorks! Grant Funds Available

PLT trained educators who are implementing fire education projects can receive grant funds ranging from \$500 to \$5,000, thanks to the

generous support of the BUREAU OF LAND MANAGEMENT. Grant proposals are being accepted now for immediate consideration. Proposal guidelines are available at www.plt.org/greenworks/grantinfo.cfm, and in the spring 2002 issue of Branch.

Biodiversity 911

The WORLD WILDLIFE FUND's *Biodiversity 911: Saving Life on Earth* website tells the important story of biodiversity using science, humor and creativity. It takes visitors on a fantastic exploration of forests, coral reefs, backyard soil and much more. Through interactive games, video clips and special downloads, you can explore biodiversity and learn how to help conserve it. Check out interactive parts of the *Biodiversity 911* website, www.biodiversity911.org.

Schoolyard Habitat Grants Available

Are you implementing a schoolyard habitat project? The NEW HAMPSHIRE FISH AND GAME DEPARTMENT is continuing to offer schoolyard habitat grants. The grants are made possible as part of the NEW HAMPSHIRE CONSERVATION LICENSE PLATE PROGRAM. For details, call Marilyn Wyzga at (603) 271-3211 or via email: mwyzga@wildlife.state.nh.us.



This malformed specimen, nicknamed One-eyed Willy, was found in Ringe, New Hampshire.

© STEVE LANDRY PHOTO

ON THE H.O.M.E. FRONT

Dig it? Regulations for Collecting Wild Plants

BY MARILYN WYZGA

Lately, we have heard a great deal about the benefits of native plants in landscaping and gardens. They are hardy, have established relationships with native wildlife, and choosing natives may help stem the problem of invasive plants. An easy way to “go native”, you might say, is to collect wild plants to plant into your garden. Should you dig up and move plants, even on your own property?

Consider this:

- ◆ Rare and endangered plants, such as pitcher plants, are protected by law from picking, digging and otherwise wild collecting.

- ◆ Certain plants, like pink lady's slipper, have a specific mycorrhizal relationship or soil need. Because these wild plants are specialized to their subterranean habitat, they rarely survive transplanting.

- ◆ Some plants require a minimum number to maintain a viable community and may have years invested in growing to that point; removing some can mean the demise of the entire community.

- ◆ All components of a living community are intricately connected. Insect-plant relationships are particularly complex and not well understood.

- ◆ Finally, soil disturbed by digging and removing native plants is ripe for seeding by the kinds of plants that pioneer disturbed soils, mostly what we consider weed species and invasives.

If your grounds or any local landscape has a healthy native plant population, it doesn't make sense to damage that area to create a native plant garden in another place.

Instead, collect seed to propagate plants. Your students will learn about seed structure, soil nutrients, how plants grow – all parts of the curriculum. In many cases, you will have mature perennials in 1-2 years. Two excellent resources are William Cullina's *Growing and Propagating Wildflowers* and *Native Trees, Shrubs and Vines*. You may also take propagation classes from places like the NEW ENGLAND WILD FLOWER SOCIETY (NEWFS), their N.H. chapter, or the ARNOLD ARBORETUM.

Keep in mind you need property owner permission to collect seed. Take only a small sample (10-20%) so the plant colonies will be able to reproduce themselves.

Growing your own is certainly more economical than buying mature plants. If you are not patient and adept at growing plants from seed, purchase a few plants from a reputable nursery (note: many also sell seed). Check out *Sources of Propagated Native Plants and Wildflowers*, available from NEWFS.

Native plant groups, such as WILD ONES NATURAL LANDSCAPERS and the PLANT CONSERVATION SOCIETY, generally agree on the value of plant rescues. A rescue is when plants are collected from an area facing imminent development; plants that would otherwise be bulldozed. Most groups recommend a code of ethics to follow in these cases, such as getting permission from the landowner.

Some plant specialists do support wild collecting of naturalized and plentiful native species, assuming a few simple guidelines are followed. While there are no specific laws in New Hampshire broadly protecting native plants,* there are many good reasons to avoid collecting in your pursuit of the native plant garden. If you do decide to collect,

- know your plants before you go into the field;
- be aware of the rare plants in your area and all laws protecting them;
- time your collecting after seed

dispersal;

- collect no more than 10% from a given population and
- be sure you have landowner permission.

**At press time, the NEW ENGLAND WILD FLOWER SOCIETY was developing a policy for wild collecting of native plants.* 🏠



Pink lady's slipper

© NHF&G PHOTO

For more information about:

- ◆ Federal regulations, protections, and funding regarding endangered and threatened species:

www.na.fs.fed.us/spfo/pubs/wildlife/endangered/endangered.htm

- ◆ N.H. rare and endangered plants:

www.nhdfl.org/formgt/nhiweb

- ◆ mycorrhizal fungi:

www.mycorrhiza.com/

- ◆ NEW ENGLAND WILD FLOWER SOCIETY classes and chapters:


www.newfs.org

*Or try a search for
“collecting native plants.”*



Happy 30th Birthday to the Clean Water Act

The year 2002 marks the 30th anniversary of a landmark piece of federal environmental legislation known as the *Clean Water Act*. In 1972, Congress passed the act in response to the public's overwhelming concern that the quality of our nation's waters was in serious jeopardy. All across the country bodies of water were being subjected to oil spills and excessive amounts of industrial and agricultural waste. One of the most famous examples of how severe pollution had become occurred in 1969 when the Cuyahoga River in Cleveland, Ohio burst into flames. In an article by *Time* magazine that same year, the Cuyahoga was described as a river that "oozes rather than flows." Even in New Hampshire, the Connecticut River, New England's longest waterway, was suffering from sewage, erosion and industrial discharge. It was so bad that *The New York Times* called the Connecticut River "America's best landscaped sewer."

Since the enactment of the *Clean Water Act*, regulations have been put in place to enable achievement of its mission to "restore and maintain the chemical, physical and biological integrity of the nation's water." This commitment to water quality has produced some remarkable results. For instance, today the Connecticut River is recognized as an American Heritage River. For more information about the *Clean Water Act* and water quality, visit www.des.state.nh.us/cleanwater. 

Project WILD receives Federal financial assistance from the US Fish and Wildlife Service. Under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972. The US Department of the Interior and its bureaus prohibit discrimination on the basis of race, color, national origin, age, disability, religion or sex (in educational programs). If you believe that you have been discriminated against in any program, activity, or facility, or if you desire additional information please write to:

The US Fish and Wildlife Service
Office for Diversity and Civil Rights Programs – External Affairs
4040 N. Fairfax Drive, Suite 130
Arlington, VA 22203

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